

Remarks

Claims 1-10 and 12 are currently pending. Claim 7 has been amended to further define the first and second curable components. Support for this amendment can be found at, for example, claim 11 and paragraphs [0042] - [0043] and [0094] of the published application. Support for the amendment to claim 9 can be found at, for example, paragraphs [0047] -- [0050] of the published application. No new matter has been added.

Information Disclosure Statement

Applicants submit herewith an Information Disclosure Statement to correct the deficiencies in the previously filed Information Disclosure Statement.

35 U.S.C. § 102(b)

The Examiner has rejected claims 7-8 and 12 as being anticipated by Vanderlinde (US 3445419) and claims 7-9 and 11 as being anticipated by Miller (US 5250391). Applicants traverse these rejections for the following reasons.

Applicants have amended claim 7 by incorporating the limitations of claim 11 rendering the rejection based on Vanderlinde moot. In addition, Miller does not expressly disclose or suggest a composition which contains 0.001 to 5% by weight of a stabilizer against premature curing prior to use as presently claimed. Therefore, claim 7, and all claims depending on claim 7, are not anticipated by either publication and Applicants respectfully request the rejections be withdrawn.

35 U.S.C. § 103(a)

The Examiner rejected claims 7-12 as being unpatentable over Steinmann et al. (DE 4440819) and 7-9 and 11 as being unpatentable over Kjellquist Lindell et al. (WO 00/55272). Applicants traverse these rejections for the following reasons.

Steinmann et al. teach a composition containing a norbenene acrylate and a polythiol. The closest example to Applicants presently claimed composition that is specifically taught is Example 1 which is a composition containing 76.1% by weight of the acrylate and 19.9% by

weight of the polythiol. Upon curing, this composition exhibited a high level of shrinkage of 14.4%. Steinmann et al. further teach that shrinkage can be lowered in cured products when the composition contains roughly equivalent amounts by weight of acrylate and polythiol (for e.g. see Example 2). Thus, Steinmann et al. teach away from and provide no reasonable expectation of success for Applicants presently claimed composition which contains at least 80% by weight of a first curable component comprising an acrylate and 5-15% by weight of a second curable component comprising a compound having at least one terminal thiol group that results in the composition, on curing with a non-coherent source of radiation, shrinking, in a linear direction, by less than 3% in length.

Kjellquist Lindell et al. teach a radiation curable coating composition containing an acrylate and an amine- or thio-functional compound. However, this publication neither teaches nor suggests an optical moulding composition containing at least 80% by weight of a first curable component comprising an acrylate and 5-15% by weight of a second curable component comprising a compound having at least one terminal thiol group that results in the composition, on curing with a non-coherent source of radiation, shrinking, in a linear direction, by less than 3% in length as presently claimed.

To further demonstrate the non-obviousness of the presently claimed invention, Applicants respectfully direct the Examiner's attention to Examples 1-3 of the present application. The inventive composition used in these Examples contained 87.8% by weight acrylate and 9% by weight of a compound having at least one terminal thiol group. Even at this low thiol content, the composition provided, upon curing with a non-coherent source of radiation, a cured product exhibiting shrinkage of less than 0.01 mm in a bar having a length of 50 mm (which is equivalent to shrinkage of less than 0.02%) and which also had sharp edges and corners. Neither publication cited above teaches or suggests that such high amounts of acrylate and low amounts of thiol in an optical moulding composition could or would give rise to such low shrinkage properties when cured by non-laser radiation.

Accordingly, in view of the amendments and remarks above, Applicants respectfully request the rejections under 35 U.S.C. § 103(a) be withdrawn.

The Commissioner of Patents is hereby authorized to deduct any fee due in connection with the filing of this document from Huntsman Corporation Deposit Account No. 08-3442.

Respectfully Submitted,



Robert Holthus
Reg. No. 50,347
Attorney for Applicants

Date: 6/22/10

Huntsman Corporation
10003 Woodloch Forest Drive
The Woodlands, Texas 77381
(281) 719-4553